



WORK PLAN

PROPOSED SOIL SAMPLES UPRR SEGMENT

Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

Prepared for:

Pechiney Cast Plate, Inc.

Prepared by:

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December 15, 2015

Project No. 0106270030

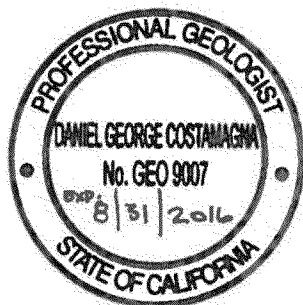


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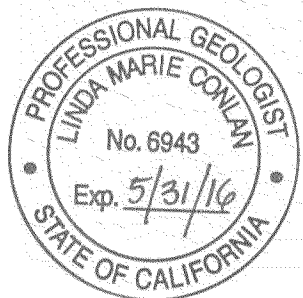
This work plan was prepared by the staff of Amec Foster Wheeler Environment & Infrastructure, Inc., under the supervision of the Engineer(s) and/or Geologist(s) whose seal(s) and signature(s) appear hereon.

The findings, recommendations, specifications, or professional opinions are presented within the limits described by the client, in accordance with generally accepted professional engineering and geologic practice. No warranty is expressed or implied.



A handwritten signature in black ink, appearing to read "D. Costamagna", written over a horizontal line.

Daniel G. Costamagna, PG
Senior Geologist



A handwritten signature in black ink, appearing to read "Linda Conlan", written over a horizontal line.

Linda Conlan, PG
Principal Geologist

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1.0 INTRODUCTION AND AGENCY DIRECTIVE

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) has prepared this work plan (WP) on behalf of Pechiney Cast Plate, Inc. (Pechiney), for the former Pechiney property located at 3200 Fruitland Avenue, in Vernon, California (the site; Figure 1) and at the direction of the United States Environmental Protection Agency (U.S. EPA) for additional characterization of polychlorinated biphenyls (PCBs) that may be encountered in soils.

The WP is intended to be a plan that describes the protocols for handling, managing and sampling soil. Depending on the analytical results obtained from the soil samples, additional samples may be collected.

Mr. Nathan Dadap of the U.S. EPA has directed Pechiney to conduct the PCB sampling activities. His contact information is as follows.

Nathan Dadap
U.S. EPA Region 9
Land Division, RCRA Branch
75 Hawthorne Street
San Francisco, CA 94105
415-972-3654

2.0 SCOPE OF WORK

This section provides procedures for soil sampling, equipment decontamination, managing and characterization of soil with residual chemicals of potential concern (COCs) remaining at concentrations below or above the site-specific remediation goals for the Pechiney site (Table 1).

2.1 SOIL CONTAINING PCBs AND OTHER COCs

PCBs were detected above the site-specific remediation goals at three locations (W-1, W-2, SWO-6-N and SWO-6-S) as shown on Figure 2. In addition, arsenic was detected above the site-specific remediation goal in two soil samples (W-24 and W-25). Soil samples will be collected at 1, 3, and 5 feet below native grade at the locations shown on Figure 2. Based on data already collected, U.S. EPA is requiring samples to be collected within 25 feet of the

active rail line shown on Figure 2. Locations where sampling occurs shall be documented and surveyed.

Soils generated during sampling shall be containerized in 55-gallon drums and relocated to the Pechiney site for waste characterization and disposal.

2.2 SOIL TESTING AND EQUIPMENT DECONTAMINATION

Soil sampling and analysis for PCBs and arsenic shall be conducted to assess the presence of these COCs at concentrations above the remediation goals (Table 1).

The number of, and the methods used to collect the soil samples and the analyses to be performed shall be selected in the field by the supervising Professional Geologist (PG) or Professional Engineer (PE). The analytical suite shall be selected based on field observations, and may include the following test methods:

- PCBs using EPA Method 8082 (using soxhlet extraction method 3540C);
- Arsenic using EPA Methods 6010B

Samples shall be collected in glass jars, which shall be sealed, uniquely labeled, and stored in an ice-chilled cooler. The samples shall be shipped to an analytical laboratory using chain of custody procedures.

Re-useable sampling equipment (hand augers, shovels, etc.) will be decontaminated using the following steps to reduce the potential for cross-contamination.

1. wash and scrub in non-phosphate detergent and potable water;
2. rinse in potable water; and
3. rinse in hexane and air dried

Investigation derived waste, including decontamination water, shall be managed and stored at the Pechiney site in accordance with regulatory requirements.

2.3 WASTE MANAGEMENT

The soil shall be profiled for disposal. Waste profiling shall consist of collecting soil samples (from hand auger) for laboratory analyses. Sampling shall be conducted in conformance with the procedures stipulated by the supervising PG or PE. Soil samples shall be analyzed for COCs specified above.

Other analyses may be required contingent on waste profiling requirements, receiving facility requirements, or other regulatory directives.

3.0 HEALTH & SAFETY AND INSURANCE REQUIREMENTS

Project personnel shall comply with all applicable federal, state, and local regulations, as well as Occupational Safety and Health Administration (OSHA) regulations specified in 29 Code of Federal Regulations 1910.120 and Code of California Regulations Title 8, Section 5192. A site-specific health and safety plan shall be prepared prior to the start of sampling.

Railroad protective liability insurance will be obtained prior to the start of work. All required insurance certificates will be included with the executed agreement for access.

4.0 REFERENCE

AMEC, 2012, Feasibility Study, Former Pechiney Cast Plate, Inc., Facility, Vernon, California, May 7.

TABLE

TABLE 1
SITE-SPECIFIC REMEDIATION GOALS
PCBs AND ARSENIC IN SOIL
Pechiney Cast Plate, Inc. Facility - UPRR Segment
3200 Fruitland Avenue
Vernon, California

Compound	Remediation Goal (mg/kg)	Explanation
PCBs in Soil		
Aroclor-1254	2.0	Noncarcinogenic RBSL ¹ for construction workers. Also protective of commercial/industrial worker exposure.
Total Aroclors <i>For soil that may be left exposed at the surface (0 to 5 feet bgs)</i>	3.5	Based on the regression analysis for dioxin-like PCB congeners versus total Aroclors in combined soil and concrete presented in Appendix E of the FS (AMEC, 2012a), the total Aroclor concentration that would result in a maximum dioxin TEQ concentration of 81 pg/g. ² Protective of cumulative commercial/industrial worker exposure, and cumulative construction worker exposure, to PCBs.
Total Aroclors <i>For subsurface soil (5 to 15 feet bgs) that only construction workers may come into contact with during excavation, grading, etc. (and that would remain at 5 to 15 feet bgs)</i>	23	Based on the regression analysis for dioxin-like PCB congeners versus total Aroclors in combined soil and concrete presented in Appendix E of the FS (AMEC, 2012), the total Aroclor concentration that would result in a maximum dioxin TEQ concentration of 530 pg/g. ³ Protective of cumulative construction worker exposure to PCBs.
Arsenic in Soil		
Arsenic	10	Site-Specific Background Concentration in Soil, established as described in Appendix B of the FS (AMEC, 2012).

Notes

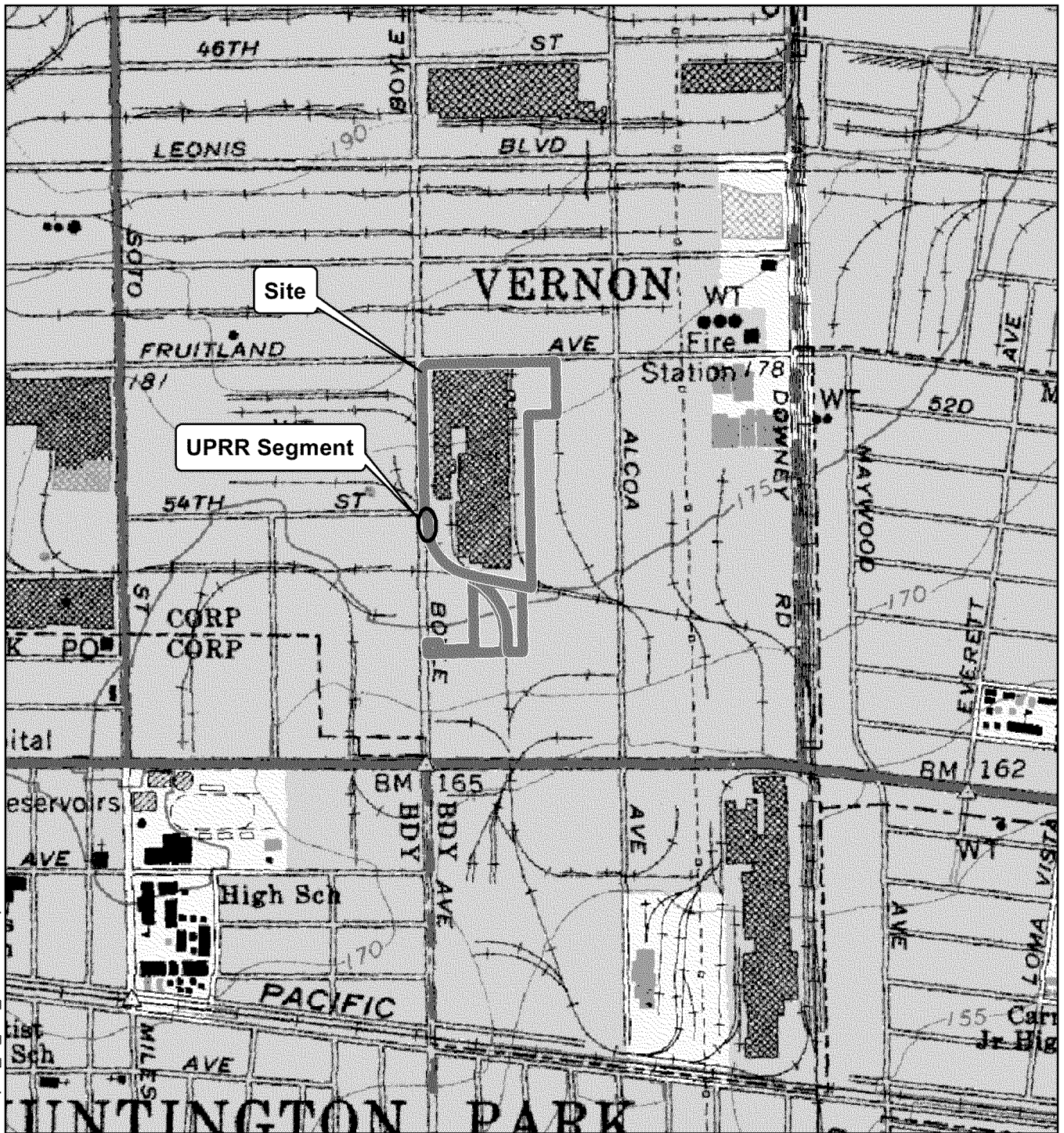
- Developed based on the methodology described in Appendix C of the FS (AMEC, 2012a), RBSLs were used to conduct the screening-level human health risk assessment for the Site.
- Based on the carcinogenic RBSL for dioxin-like PCB congeners for outdoor commercial/industrial workers (8.1 pg/g TEQ), adjusted to a target cancer risk of 10⁻⁵.
- Based on the carcinogenic RBSL for dioxin-like PCB congeners for construction workers (53 pg/g TEQ), adjusted to a target cancer risk of 10⁻⁵.

Abbreviations

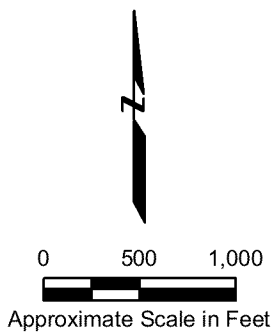
bgs = below ground surface
FS = Feasibility Study
mg/kg = milligrams per kilogram
PCBs = polychlorinated biphenyls
pg/g = picograms/gram

RBSL = risk-based screening level
TEQ = toxic equivalent

FIGURES



File path: Y:\10627.003.0\esri\Proposed UPRR Soil Sample\fb_site_location map.mxd



Basemap modified from U.S.G.S. 7.5 minute quadrangle map
South Gate 1964, California. Photo-revised 1981.

SITE LOCATION MAP
Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California



Date: 12/14/2015

Project No.: 10627.003

Figure

Submitted By: lc

Drawn By: pah

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